What is claimed is:

1. A method for fabricating a thin line structure, comprising the steps of:

preparing a given silicon base,

forming, on said silicon base, a strain-relaxed silicon germanium layer with penetrated dislocations,

forming a metallic layer on said silicon germanium layer to form a multilayered intermediate structure which is made of said silicon base, said silicon germanium layer and said metallic layer,

and

heating said multilayered intermediate structure to diffuse metallic elements of said metallic layer through said penetrated dislocations of said silicon germanium layer and to form a thin line structure made of metallic silicide at a boundary face between said silicon base and said silicon germanium layer.

2. The fabricating method as defined in claim 1, wherein the density of said penetrated dislocations of said silicon germanium layer is set within 10^{-12}-$10^{-8}/cm^2$.

3. The fabricating method as defined in claim 2, wherein the germanium content of said silicon germanium layer is set within 20-70 atomic percentages.

4. The fabricating method as defined in claim 1, wherein said thin line structure is formed along the <011> crystal orientation of silicon crystal.

5. The fabricating method as defined in claim 1, wherein said metallic layer is made of at least one selected from the group consisting of Ni, Co, Ti, Pt, Fe and Pd.

6. The fabricating method as defined in claim 5, wherein said metallic layer is made of Ni.

7. The fabricating method as defined in claim 6, wherein said thin line structure is made of nickel silicide with at least one of NiSi phase and $NiSi_2$ phase.

8. A multilayered structure comprising:

a given silicon base,

a strain-relaxed silicon germanium layer with penetrated dislocations which is formed on said silicon base,

and

a thin line structure made of metallic silicide which is formed at a boundary

face between said silicon base and silicon germanium layer.

9. The multilayered structure as defined in claim 8, wherein the density of said penetrated dislocations of said silicon germanium layer is within 10^{-12}-$10^{-8}/cm^2$.

10. The multilayered structure as defined in claim 9, wherein the germanium content of said silicon germanium layer is within 20-70 atomic percentages.

11. The multilayered structure as defined in claim 8, wherein said thin line structure is along the <011> crystal orientation of silicon crystal.

12. The multilayered structure as defined in claim 8, wherein said thin line structure is made of metallic silicide containing at least one selected from the group consisting of Ni, Co, Ti, Pt, Fe and Pd.

13. The multilayered structure as defined in claim 12, wherein said thin line structure is made of nickel silicide.

14. The multilayered structure as defined in claim 13, wherein said nickel silicide contains at least one of NiSi phase and $NiSi_2$ phase.

15. A multilayered intermediate structure comprising:

a given silicon base,

a strain-relaxed silicon germanium layer with penetrated dislocations which is formed on said silicon base,

and

a metallic layer which is formed on said silicon germanium layer.

16. The multilayered intermediate structure as defined in claim 15, wherein the density of said penetrated dislocations of said silicon germanium layer is within 10^{-12}-$10^{-8}/cm^2$.

17. The multilayered intermediate structure as defined in claim 16, wherein the germanium content of said silicon germanium layer is within 20-70 atomic percentages.

18. The multilayered intermediate structure as defined in claim 15, wherein said metallic layer is made of at least one selected from the group consisting of Ni, Co, Ti, Pt, Fe and Pd.

19. The multilayered intermediate structure as defined in claim 18, wherein said metallic layer is made of Ni.